

is placed on a second imaginary line IL2. The first and second imaginary lines IL1 and IL2 are substantially parallel to the first direction DR1. The first imaginary line IL1 is defined between the display area DA and the second imaginary line IL2.

**[0093]** An end portion of the input third conductive layer CL31\_1 of the first folding line FL1 extends substantially parallel to a line connecting ends of the first and second imaginary lines IL1 and IL2, and is connected to the edge second conductive layer CL2\_11 of the first folding line FL1.

**[0094]** A center portion of the output third conductive layer CL32\_2, the first portion PT1\_2, and the second portion PT2\_2 of the second folding line FL2 are placed on a third imaginary line IL3, and a center portion of the input third conductive layer CL31\_2 of the second folding line FL2 is placed on a fourth imaginary line IL4. The third and fourth imaginary lines IL3 and IL4 are substantially parallel to the first direction DR1. The third imaginary line IL3 is defined between the display area DA and the fourth imaginary line IL4. For example, the third imaginary line IL3 is defined between the first and second imaginary lines IL1 and IL2.

**[0095]** An end portion of the input third conductive layer CL31\_2 of the second folding line FL2 extends substantially parallel to a line connecting ends of the third and fourth imaginary lines IL3 and IL4, and is connected to the edge second conductive layer CL2\_12 of the second folding line FL2.

**[0096]** A center portion of an output third conductive layer CL32\_3, a first portion PT1\_3, and a second portion PT2\_3 of the third folding line FL3 are placed on a fifth imaginary line IL5, and a center portion of an input third conductive layer CL31\_3 of the third folding line FL3 is placed on a sixth imaginary line IL6. The fifth and sixth imaginary lines IL5 and IL6 are substantially parallel to the first direction DR1. The fifth imaginary line IL5 is defined between the display area DA and the sixth imaginary line IL6.

**[0097]** An end portion of the input third conductive layer CL31\_3 of the third folding line FL3 extends substantially parallel to a line connecting ends of the fifth and sixth imaginary lines IL5 and IL6, and is connected to an edge second conductive layer CL2\_13 of the third folding line FL3.

**[0098]** A center portion of an output third conductive layer CL32\_4, a first portion PT1\_4, and a second portion PT2\_4 of the fourth folding line FL4 are placed on a seventh imaginary line IL7, and a center portion of an input third conductive layer CL31\_4 of the fourth folding line FL4 is placed on the seventh imaginary line IL7. The seventh imaginary line IL7 is substantially parallel to the first direction DR1 and defined adjacent to the sixth imaginary line IL6 in the second direction DR2.

**[0099]** An end portion of the input fourth conductive layer CL31\_4 of the fourth folding line FL4 extends substantially parallel to the first direction DR1, and is connected to an edge second conductive layer CL2\_14 of the fourth folding line FL4.

**[0100]** According to exemplary embodiments, the touch panel 200 has been described an example of the flexible electronic device to which the first to fourth folding lines FL1 to FL4 are applied, and the first and second touch sensors TS1-1 to TS1-4 and TS2-1 to TS2-8 (refer to FIG. 4) have been described as an example of driven elements of

the flexible electronic device. In addition, the first and second sensor patterns TSP1 and TSP2 (refer to FIG. 4) have been described as an example of driving electrodes of the driven elements.

**[0101]** Although certain exemplary embodiments and implementations have been described herein, other embodiments and modifications will be apparent from this description. Accordingly, the inventive concept is not limited to such exemplary embodiments, but rather to the broader scope of the presented claims and various obvious modifications and equivalent arrangements.

What is claimed is:

1. A flexible electronic device, comprising:

a base substrate;

a first line disposed on the base substrate and extending in a first direction; and

a second line disposed on the base substrate and extending in the first direction, the first and second lines being arranged in a second direction different from the first direction, each of the first and second lines comprising: a first conductive layer comprising first portions and second portions alternately disposed with the first portions along the first direction, the first conductive layer having a first modulus; and

second conductive layers respectively overlapped with the first portions of the first conductive layer in a third direction substantially perpendicular to the first and second directions, the second conductive layers not being overlapped with the second portions of the first conductive layer in the third direction and having a second modulus different from the first modulus,

wherein a first width in the second direction of each of the first portions of the first conductive layer is less than a second width in the second direction of each of the second portions of the first conductive layer.

2. The flexible electronic device of claim 1, wherein the first modulus is less than the second modulus.

3. The flexible electronic device of claim 1, wherein the first conductive layer has a flexibility greater than a flexibility of a second conductive layer of the second conductive layers.

4. The flexible electronic device of claim 1, wherein the resistance per unit length of the first conductive layer is greater than the resistance per unit length of a second conductive layer of the second conductive layers.

5. The flexible electronic device of claim 1, wherein a third width in the second direction of each of the second conductive layers is less than the first width.

6. The flexible electronic device of claim 1, wherein the second portions of the first conductive layer of the first line are not overlapped with the second portions of the first conductive layer of the second line in the second direction.

7. The flexible electronic device of claim 6, wherein at least a portion of the second portions of the first conductive layer of the first line is overlapped with at least a portion of the second portions of the first conductive layer of the second line in the first direction.

8. The flexible electronic device of claim 1, further comprising:

a first non-folding area configured to be not curved when an external force is applied to the base substrate;